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A FOLLOW-UP STUDY OF FORMER HIGH SCHOOL STUDENTS
ENTERING THREE SELECTED HIGH SCHOOLS IN 1946

A Thesis
Presented to
the Faculty of the Graduate School
Appalachian State Teachers College

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by
Vernon Moore McNeely
1958

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Schools must continually revise and improve the curriculum. Former students, either drop-outs or graduates, offer a source of information that can be used for curriculum revision.

The purpose of this investigation was to gain suggestions for improving schools; to determine reasons why students left school before graduation; to determine characteristics of school drop-outs; to compare occupational histories of drop-outs and graduates; and to evaluate the technique of involving lay citizens in studying school problems.

Students from three high schools in Burke County, North Carolina who entered school in 1946 and were scheduled to graduate in 1950 were investigated. Of the 197 former students in the study, 111 were graduates and 86 were drop-outs. Information concerning each student was obtained from the students' cumulative folder and by interviewing or mailing a questionnaire. A team of 34 lay citizens interviewed former students who were living in the county; the remaining students were contacted by mail.

In rating the subjects and activities they had in school, graduates gave the highest ratings to the lunchroom, guidance, human relations, English, mathematics, science, and the commercial programs as best.

Reasons for drop-outs quitting school in order of times mentioned were (1) wanted a job or needed money for self, (2) to get married, (3) unable to dress well, (4) saw no value in education, and (5) parents needed help at home.

In attempting to discover characteristics of potential drop-outs, factors in the background of graduates and drop-outs were compared. It was found that graduates had higher intelligence quotients, grades, and personality ratings, read more books, attended school more, repeated fewer grades, and had fewer siblings in family. There was no significant difference in the educational and economic status of parents.

The graduates had a larger percentage of former students than the drop-outs in professional and managerial jobs, skilled occupations, and attending school for advanced training.

When lay participants who helped conduct the study were requested to evaluate their experiences, a large majority stated that participation in the study was helpful in improving public relations and increasing interest and understanding of the schools' programs.

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CHAPTER I

INTRODUCTION

Evaluation should be an integral part of every school program if poor practices are to be corrected and good procedures are to be encouraged. The follow-up study is one method commonly used to evaluate the effectiveness of the school program. Schools follow-up their graduates or drop-outs usually for one or more of three main purposes. First, there is a natural desire to obtain information from school leavers which might help future students in making vocational, educational, and social adjustments. A second purpose of follow-up studies is to evaluate the instructional program and other programs of a school. An evaluation of this nature is extremely important because it considers the opinions of former students who should have been the chief benefactors of the educational program. A third purpose of the follow-up study of school leavers is to gather general information about those who have left to aid the schools as well as social agencies in the community.

The personnel used in conducting a follow-up study can make a great difference in the values derived from the investigation. Most studies in the past have depended exclusively upon school personnel and clerical aid for planning and carrying

out detailed work. Recently, however, in many sections of the country citizens have been invited by educators to participate in projects for school planning and improvement. "Lay and professional participation in educational planning can lead to better solutions of problems, better public understanding and more support for school."¹

I. THE PROBLEM

It was the purpose of this investigation (1) to gain suggestions for improving the school; (2) to determine reasons why students left before or remained in school until graduation; (3) to determine characteristics of school drop-outs; (4) to compare occupational histories of drop-outs and graduates; and (5) to evaluate the technique of involving lay citizens in studying school problems.

II. PROCEDURES FOR CONDUCTING STUDY

This study is an analysis of data which were collected as part of the Burke County Follow-Up Study conducted in 1956.²

¹G. Gordon Ellis, "The Cooperative Project in School Improvement and Leadership Development," The High School Journal, Vol. 38, p. 248, April, 1955.

²H. T. Conner, "School Drop-Outs -- Causes and Cures," North Carolina Education, Vol. 23, pp. 8-9, April, 1957.

Because of lack of time and personnel, many important aspects of the Burke County Study data were not considered when the study was in progress but were left for a subsequent report.

Unlike the parent study, this investigation is only concerned with the three largest high schools in Burke County: Drexel, Valdese, and Hildebran. The data gathered was reduced and reviewed for this study. Although in several instances phases of the County-wide Study are analyzed for the three above schools, most of this study is devoted to materials not previously analyzed.

The Burke County Follow-Up Study was sponsored by the six county high schools with the cooperation of the Burke County Guidance Service. All students, both drop-outs and graduates, who entered high school in 1946 and who were to graduate in 1950, were included in the investigation. Members of local parent-teacher organizations and students cooperated in making the project a success.

The writer was a principal of one of the High Schools having a part in the survey. It was the duty of the principal to organize and supervise the collection of all the data to be used in the study. After all information was collected it was compiled and summarized by the principal with help of some of the school personnel and lay people of the community.

The first step in this endeavor was to organize working groups at each of the high schools to carry out the details

required to complete the study. The parent-teacher associations agreed to help and each organization appointed an advisory committee, composed of six members, to work with the principal at their school. After the advisory committee was appointed at the schools, each committee assigned one individual to work at the County level with two students and the guidance counselor from each school. This committee representing the entire County high school system was assigned the task of designing questionnaires, school data sheets, and summary sheets. In the meantime counselors were busy compiling lists and addresses of former students and withdrawing cumulative folders for extracting background information on the participants.

A publicity committee was appointed and assigned the responsibility of keeping the public informed of the progress of the project and making a report of final results to the local school and the newspapers in the area. A principal, counselor, two parents, and a student made up the membership of this committee.

After the questionnaires, school data sheets, and summary forms³ were designed and approved by the advisory committees and principals, and the names and addresses of former students were compiled, the school leavers were contacted by mail or in person for the purpose of obtaining

³See Appendix for forms.

information pertinent to the study. Using the interview guides which had been completed, teams of parents from each of the schools interviewed the school leavers who still lived in Burke County. Those former students who lived outside of the County were sent questionnaires through the mail.

During the period when the former students were being contacted, students, under the supervision of counselors at each school, were extracting information from the cumulative folder and recording it on the school data sheets which had been previously designed. Data on these sheets were analyzed primarily for the purpose of identifying factors which might be helpful in predicting students who are potential drop-outs.

After the deadline for receiving mailed questionnaires and interviewing was reached, groups of students and parents at each of the high schools met for the purpose of summarizing the data on the questionnaires. Regular forms and an outline procedure was used to complete this task. The responsibility for this part of the project had been assigned to the counselor at the local school.

A committee of four people was given the responsibility of analyzing and reporting results of the study. A written report appeared in all the papers in the area and an oral report was made to each high school parent-teacher organization in the County. Both parents and teachers, as individuals or panel members, helped present the findings of the study.

III. LIMITATIONS OF STUDY

Only students who entered Drexel, Valdese, and Hildebran Schools in Burke County in 1946 and were scheduled to graduate in 1950 were used in the study. Included in the sampling would be any student who dropped out of the County schools between September of 1946 and June of 1950 and who did not enroll in another high school. However, those students who received part of their high school training in the above mentioned schools and then transferred to a high school in another system were eliminated from consideration. It was felt that the effect of the experiences in another school would influence their evaluation of the Burke County Schools. Background information on the school leavers was limited to data recorded in the students' cumulative folders. No attempt was made to study data concerning former students by school attended. All findings are based on information analyzed for total number of drop-outs and graduates.

IV. DEFINITION OF TERMS

Several terms found in the context of this study will have specific meaning. The definitions of these terms follow:

Graduate: A graduate is any student who entered one of the ~~three~~ high schools in ~~this~~ study in September of 1946 and graduated from one of the same schools in 1950.

Drop-out: A drop-out is any student who entered one of the three high schools in this study in 1946 and dropped out of school before June 1950 without receiving additional high school training in another system.

School data sheet: A school data sheet is a form used to collect information about former students. Only information found in the students' cumulative folder is printed on this form.

Follow-up questionnaire: The follow-up questionnaire is a form designed and used by those who conducted the Burke County Follow-Up Study. Most of the form is used to obtain subjective information about schools from school leavers.

V. DESCRIPTION OF SAMPLE

Table I presents the composition of the population of former students used in the study. The total of 197 former school pupils consisted of 111 graduates and 86 drop-outs.

There were 53 boys and 58 girls in the graduate group and 47 boys and 39 girls in the drop-out group. Frequencies for the above categories may also be found for each high school by referring to Table I.

VI. STATISTICAL TREATMENT OF DATA

Several familiar statistical techniques were employed during this investigation when there was a need to summarize

TABLE I

NUMBER OF FORMER FEMALE AND MALE GRADUATES
AND DROP-OUT STUDENTS FOR THE CLASS OF 1950
BY THE HIGH SCHOOL ATTENDED

Name of School	Graduates		Drop-outs		Total
	Males	Females	Males	Females	
Drexel	16	18	14	12	60
Hildebran	16	18	15	12	61
Valdese	21	22	18	15	76
Total	53	58	47	39	197

findings or make comparisons. The arithmetic mean along with the standard deviation were used primarily for summarization; the test for the significance of difference of means (t test) and the Chi-square tests were calculated to show relations. The formulas for calculating these measures follow:

$$\text{Mean} = \frac{\sum x}{N}$$

$$\text{Standard Deviation} = \sqrt{\frac{\sum x^2 - \frac{(\sum x)^2}{N}}{N}}$$

$$\text{S. E. of Difference of Mean} = \sqrt{\frac{SD_1^2 + SD_2^2}{N_1 + N_2}}$$

$$T = \frac{M_1 - M_2}{\text{S.E. Difference of Means}}$$

$$\text{Chi-Square} = x^2 = \sum \left[\frac{(f_o - f_e)^2}{f_e} \right]^2$$

VII. REVIEW OF CURRENT LITERATURE

In order to acquire more insight for conducting this investigation, a review of current literature pertaining to follow-up of high school students was made. A few of the most significant findings are summarized and reported in the concluding section of this chapter.

⁴Margaret Jarman Hagoood, Statistics For Sociologists, (New York: Henry Holt and Company, 1941) pp. 211-214.

In a release in 1956 James P. Mitchell, Secretary, U. S. Department of Labor, and Harold C. Hunt, Acting Secretary, U. S. Department of Health, Education, and Welfare, joined in the national effort of industrial and educational organizations to urge all young people who had not graduated from high school to return to the classroom the following fall.⁵ In discussing the advantages of the value of a high school diploma, they presented the facts that follow: (1) Most jobs today require at least a high school education, (2) It's easier to find a job and hold a job if you have a high school diploma, (3) The 1950 census showed that unemployment rates are half again as high among young men who start high school but do not graduate as they are among graduates, (4) A high school education is the foundation for future training, and (5) The more education a person has, the higher his income is likely to be.

In a report dated April, 1952 from the North Carolina Department of Public Instruction,⁶ it was stated that for 1949-50 44,000 boys and girls dropped out of school. On a

⁵Harold C. Hunt and James P. Mitchell, "For Release". (Washington: United States Department of Labor and United States Department of Health, Education, and Welfare, 1956), p. 1-8.

⁶"State School Facts", Vol. 24: 1-4 (Raleigh, N. C.: State Department of Public Instruction, April, 1952) P. 1.

county basis there was a range from a low of 4.0 percent in Pasqustank County to a high of 11.6 percent in Avery County. For this year Burke County had a 6.1 percent drop-out rate. For the state as a whole figures indicated that 5 out of every 100 students enrolled in the schools dropped out before the end of the year.

In a later report⁷ it was stated that "the main reason for the high mortality from grade one to the completion of high school appears to be due entirely to drop-outs, many of which started out by being non-promotions, or failure to do the work required in order to be promoted to the next succeeding grade."

In 1953 Spencer⁸ suggested a number of ways to identify potential drop-outs. His list includes the following: "(1) One of the most common symptoms of the potential drop-out is a consistently low level of achievement as measured by class grades, (2) retardation or repetition of grades; a year or more over age for the group, (3) little or no participation in extra-curricular activities, (4) consistent absenteeism and lack of interest in school work, and (5) low income family background or signs of extreme economic difficulty."

⁷Op: cit. 26:1 November, 1953.

⁸Lyle M. Spencer, "Guidance News Letter", Chicago: Science Research Associates, 1956, P. I.

The writer suggests that the schools can reduce the number of drop-outs by identifying these students through the administration and analysis of a good achievement test battery, by giving recognition of achievement other than academic, by broadening the offering of the school, by reducing hidden tuition costs, and by improving individual guidance and counseling.

Johnson and Legg⁹ conducted a study in 1948 with 440 boys and girls in Louisville, Kentucky, who had not completed high school. The summary of their study follows:

"The findings of this study show that the problems of young people in connection with school leaving are many and varied and are inextricably interwoven with their own personal needs, with existing educational programs, and with opportunities in the employment field. Here are boys and girls who are dissatisfied with the school situation in which they find themselves and impatient to be free of its shackles; some want to earn their own livelihood or are forced to from economic necessity; others are confused and influenced by a complexity of other circumstances. Sifted down to each individual boy or girl, however, the picture becomes clearer, and the personal problems of each are not so difficult but that some adjustment could be made or some assistance given that would keep the young person in school until he is better equipped to take his place in the adult world."

In 1957 Segel and Schwarm¹⁰ made a report of a study

⁹Elizabeth S. Johnson and Caroline E. Legg, Why Young People Leave School. (Washington: Association of Secondary School Principals, 1948) P. 15.

¹⁰David Segel and Oscar J. Schwarm, "Retention in High Schools in Large Cities." (Washington: United States Department of Health, Education, and Welfare, 1957, No. 15) P. 16.

of school holding power conducted in cities of over 200,000 population. Their analysis from the data collected follow:

"The problem of retention is a problem only in the fact that pupils do not finish high school. It is not a particular problem that youth do not attend school long enough. Actually, drop-outs stay in school, in number of years, almost as long as high school graduates. The problem of retention, therefore, becomes either (a) to see that they are not retarded so much and they thus get the benefit of a high school education before they attain an age when they can leave school, either with or without work permits, or (b) an attraction must be set up to induce them to remain in school past this age of easy leaving. In any case, there is an attraction away from school. This attraction is so strong with some that they leave school before they can do so legally. However, the data indicate that the majority of the school leaving is done under compulsory schooling and work-permit laws. This pull away from school may, because of these factors, indicate (a) actual economic need of the student and/or of his family, or (b) the lack of adaptation of the school to the student, resulting in school failure and/or dis-interest in school because of no apparent relation of the program to his own needs and characteristics."

Another study¹¹ on drop-outs was limited to youth who left secondary school in Kentucky before graduation during the period of 1948-1950. The purpose of the study was to: (1) gain evidence to indicate early signs of vulnerability to early school leaving and (2) determine what measures secondary schools in Kentucky might take to increase their holding power.

¹¹G. L. Weaver, "School Drop-Outs", Educational Digest, 19:5-7, May, 1954.

The investigator concluded that the primary reason that students left school early was due to frequent grade failure. The relationship between drop-outs and failure and repetition in the first grade was particularly noticable. To help remedy the situation, it was suggested that the school broaden and enrich their curriculum, employ well-trained teachers and adequate guidance personnel, and make occupational information available to all pupils.

In a study conducted in 1954 Dresher¹² attempted to determine the factors which contributed to causing secondary students in the Detroit Public Schools to drop-out of school before graduation. The investigator concluded there were twelve holding power factors and four hastening power factors. Holding power factors included: (1) Out-of-school employment, (2) participation in extra curricular activities, (3) having a sense of belonging in the high school situation, (4) having school spirit, (5) participation in out of school activities, (6) good attitude of parents toward education and high school, (7) good attitude of parents toward teachers, (8) the pupil having a career plan, (9) a desire to complete high school, (10) skilled father in preference to unskilled, (11) good citizenship rating, and (12) living with both natural parents.

¹²R. H. Dresher, "Factors in Voluntary Drop-Outs", Personnel and Guidance Journal, 32:287-289, January, 1954.

Hastening power factors included: (1) Elementary School failures, (2) absences in the ninth grade, (3) low scholastic aptitude, and (4) being a discipline case.

The above summary of studies indicates that the sampling of students came from different sizes and types of schools. Also, it was shown that the investigators varied in the techniques employed. This study was conducted to obtain pertinent information concerning students in the Burke County Schools.

CHAPTER II

ANALYSIS OF DATA

This part of the study is devoted to analyzing data in order to provide information concerning the five statements of problems listed in Chapter I. Analysis of data is made by applying appropriate statistical techniques and summary of findings is presented in tabular form.

I. SUGGESTIONS FOR IMPROVING SCHOOLS

One of the primary purposes of the investigation was to gain suggestions from former students for improving the present school program. Each drop-out and graduate from the Drexel, Valdese, and Hildebran High Schools was requested to rate subjects and activities which he had in high school and to signify which of these subjects in his opinion needed more emphasis. In rating subjects the former students were requested to assign to each subject either superior (5), good (4), average (3), poor (2), or very poor (1). The ratings of school subjects and activities received from both the graduate and drop-out groups are shown in Tables II and III. For example, in Table III, it is seen that 105 out of 111 graduates rated the lunchroom programs in the three schools under consideration. Of this 105, over fifty per cent rated this service superior; thirty per cent, good; fourteen per

TABLE II
RATINGS OF SCHOOL SUBJECTS AND ACTIVITIES
BY TOTAL GRADUATE GROUP
N=111

Subject or Activity**	Number Reporting*	Superior 5		Good 4		Average 3		Poor 2		Very Poor 1	
		N	%	N	%	N	%	N	%	N	%
Lunchroom	105	53	51	32	30	15	14	4	4	1	1
Transportation	100	30	40	20	20	11	11	17	17	22	22
Physical Education and Athletic Program	111	18	16	14	13	27	24	18	16	34	31
Library	111	11	10	13	12	53	48	28	25	6	5
Guidance Program	111	53	48	40	36	6	5	8	7	4	4
Human Relations Courses	50	15	30	10	20	18	35	5	10	2	5
Agriculture	44	9	21	14	32	16	36	3	7	2	5
Home Economics	38	6	16	15	40	10	26	7	18	0	0
Extra-Curricular	80	11	14	15	18	42	53	5	6	7	9
English	111	56	50	38	35	7	6	9	8	1	1
Foreign Languages	64	12	18	14	22	20	32	13	20	5	8
Social Studies	111	19	17	22	20	33	30	26	23	11	10
Mathematics	111	53	48	42	38	4	4	6	5	6	5
Science	110	36	33	29	26	26	24	10	9	9	8
Commercial Courses	72	29	40	23	32	9	12	7	10	4	6
Health	60	6	10	10	16	25	42	11	18	8	14

*Evidently, a few reported who did not take courses.

**On all tables, information is in order that appeared on collecting instruments.

TABLE III

RATINGS OF SCHOOL SUBJECTS AND ACTIVITIES
BY TOTAL DROP-OUT GROUP
N=86

Subject or Activity	Number Reporting	Superior 5		Good 4		Average 3		Poor 2		Very Poor 1	
		N	%	N	%	N	%	N	%	N	%
Lunchroom	82	34	42	22	28	15	17	10	12	1	1
Transportation	70	39	13	23	33	28	40	10	14	0	0
Physical Education and Athletic Program	84	17	20	27	32	29	35	9	11	2	2
Library	85	5	6	26	30	52	61	2	3	0	0
Guidance Program	78	23	30	20	25	31	40	4	5	0	0
Human Relations Courses	40	10	25	10	25	10	25	10	25	0	0
Agriculture	20	0	0	14	70	6	30	0	0	0	0
Home Economics	16	1	6	10	62	4	25	1	6	0	0
Extra-Curricular	55	0	0	0	0	14	26	28	51	13	23
English	85	22	26	12	14	46	54	5	6	0	0
Foreign Languages	19	0	0	0	0	100	100	0	0	0	0
Social Studies	86	6	7	38	44	30	35	12	14	0	0
Mathematics	86	28	32	12	14	34	40	6	7	6	7
Science	80	12	15	12	15	48	60	6	8	2	2
Commercial Courses	15	4	27	3	20	7	46	1	7	0	0
Health	86	10	12	12	14	34	39	26	30	4	5

cent, poor; and one per cent, very poor.

In order to obtain a clearer idea of how the former students evaluated their high school subjects and activities, the mean rating for each of the subjects for both the graduates and drop-outs was obtained. Numerical values of 5 (superior), 4 (good), 3 (average), 2 (poor), and 1 (very poor) were assigned and averages calculated. After the averages were determined, a mean between 1.0-1.59 was assigned a rating classification of very poor; between 1.6-2.59, poor; between 2.6-3.59, average; between 3.6-4.59, good; and between 4.6-5.0, very good.

Table IV presents the mean rating, the rating classification, and the rank for each subject and activity for the graduate and drop-out groups. It is seen that the lunchroom program received the highest ratings from each group. In receiving the number 1 rank, a mean rating of 4.26 and rating classification of "good" was recorded for the graduate group, whereas, a mean rating of 3.95 and rating classification of "good" was calculated for the drop-outs. In addition to the lunchroom program, commercial courses, English courses, and the guidance program received a "good" rating classification from both groups. The graduates valued high enough for a "good" rating their courses in human relations, mathematics, and science as did the drop-outs for their courses in agriculture and home economics.

TABLE IV

MEAN RATING AND RANK OF SCHOOL SUBJECTS AND ACTIVITIES
BY TOTAL GRADUATE AND DROP-OUT GROUPS

Subject or Activity	Graduates			Drop-Outs		
	Mean	Rating Classif- ication*	Rank	Mean	Rating Classif- ication*	Rank
Lunchroom	4.26	Good	1	3.95	Good	1
Transportation	3.19	Average	12	3.44	Average	10
Physical Education and Athletic Program	2.68	Average	16	3.57	Average	8
Library	2.95	Average	14	3.40	Average	12
Guidance Program	4.17	Good	3	3.79	Good	2
Human Relations Courses	3.62	Good	7	3.50	Average	9
Agriculture	3.57	Average	8	3.70	Good	3
Home Economics	3.53	Average	9	3.69	Good	4
Extra-Curricular	3.22	Average	11	2.02	Poor	16
English	4.25	Good	2	3.60	Good	6
Foreign Languages	3.23	Average	10	3.00	Average	14
Social Studies	3.11	Average	13	3.44	Average	10
Mathematics	4.17	Good	3	3.58	Average	7
Commercial Courses	3.92	Good	5	3.67	Good	5
Science	3.66	Good	6	3.32	Average	13
Health	2.92	Average	15	2.98	Average	15

*Rating Classification: 1.0-1.59, very poor; 1.6-2.59, poor; 2.6-3.59, average; 3.6-4.59, good; 4.6-5.0, very good.

Receiving "average" ratings and probably needing more improvement in the judgment of the former students are courses and activities that follow: health, social studies, foreign languages, libraries, physical education and athletic programs, and transportation. Extra-curricular programs also received an "average" rating from the graduates; however, it was given the lowest rating recorded, "poor", by the drop-outs.

In addition to rating the subjects and activities in which they participated, graduates and drop-outs were requested to indicate which of these in their opinion need more emphasis in the future. Table V gives a summary of their opinions. According to the graduates, the six of the sixteen subjects and activities needing most emphasis are the guidance program, libraries, human relations courses, English, science, and mathematics. On the other hand, the graduates gave fewer votes for subjects needing emphasis to transportation, foreign language, agriculture, the lunchroom programs, social studies, and physical education and athletic programs.

Drop-outs indicated by their votes that human relations courses, guidance, English, commercial subjects, mathematics, and the libraries needed most emphasis. Receiving fewer votes for more emphasis were the transportation, foreign languages, lunchroom programs, agriculture, social studies, and home

TABLE V

NUMBER OF GRADUATE AND DROP-OUT STUDENTS WHO BELIEVE
SUBJECTS AND ACTIVITIES NEED MORE EMPHASIS

Subjects and Activities	Graduates = 111			Drop-Outs = 86		
	N	% of Total	Rank	N	% of Total	Rank
Lunchroom	6	5	13	3	4	14
Transportation	2	2	16	1	1	15
Physical Education and Athletic Program	14	12	10	18	22	9
Library	65	58	2	32	38	6
Guidance Program	76	68	1	44	53	2
Human Relations Courses	59	53	3	68	82	1
Agriculture	3	3	14	6	7	13
Home Economics	13	12	10	12	14	11
Extra-Curricular	39	35	7	28	34	8
English	57	51	4	40	48	3
Foreign Languages	2	2	15	1	1	15
Social Studies	10	9	12	8	10	12
Mathematics	43	39	6	33	40	5
Science	53	48	5	17	20	10
Commercial Courses	31	28	9	34	41	4
Health	37	33	8	29	35	7

economics.

Based on the frequency of times mentioned by graduates, a moderate amount of emphasis should be placed on commercial courses, health, extra-curricular activities, and home economics. Similarly, health, extra-curricular activities, physical education and athletics, and science were rated by the drop-outs.

II. REASONS FOR QUITTING SCHOOL

Another primary purpose of this investigation was to determine reasons why students left before or remained in school until graduation. In order to obtain this information drop-outs were asked to list the primary reason for leaving school early as well as to give factors and influences which either encouraged or discouraged them to continue their high school education. Graduates who at one time considered quitting school were requested to state factors which helped encourage them to get their diplomas.

Table VI gives the primary reason for leaving school early as stated by the total drop-out group, the female early school leavers, and the male drop-outs. The chief reason, listed by 52 per cent of the eighty-six total drop-out group, was a desire to obtain a job or the need for money. When stated reasons were tabulated by sex, both females and males gave this identical reason the highest rank. Approximately

TABLE VI

PRIMARY REASON GIVEN BY DROP-OUTS FOR
LEAVING SCHOOL BEFORE GRADUATION

Primary Reason Stated For Leaving School Early	Total = 86			Females = 39			Males = 47		
	N	%	Rank	N	%	Rank	N	%	Rank
(1) Wanted a job or needed money for self	45	52	1	17	45	1	28	60	1
(2) Disliked school in some manner	4	5	5.5	2	5	5	2	4	5
(3) Saw no value in education	10	12	3	3	7	4	7	15	2
(4) To get married	12	14	2	11	29	2	1	2	6.5
(5) Failing work	1	1	8.5	0	0	8.5	1	2	6.5
(6) Parents needed help at home	6	7	4	1	2	6.5	5	11	3
(7) Unable to dress well	4	5	5.5	4	10	3	0	0	8.5
(8) School work too difficult	3	3	7	0	0	8.5	3	6	4
(9) Broken home	1	1	8.5	1	2	6.5	00	0	8.5
Total	86	100		39	100		47	100	

45 per cent of the thirty-nine females' and 60 per cent of the forty-seven males' reasons were tabulated under this category.

In order of rank the total drop-out group indicated they left school for the reasons that follow: To get married, saw no value in education, parents needed help at home, unable to dress well, disliked school in some manner, school work too difficult, failing work, and because of broken home.

Evidently, except for wanting a job and money, females and males differ somewhat in the reasons they gave for not continuing their education. For example, the second and third highest number of reasons given by females for quitting were "to get married" (29 per cent) and "unable to dress well" (10 per cent). Second and third in frequency for the males were "saw no value in education" (15 per cent) and "parents needed help at home" (11 per cent). Receiving fewer votes by both sexes were the reasons previously listed for the total drop-out group.

School personnel, parents, other members of family, ministers, service recruiting personnel, employment or welfare department personnel, potential employers and friends or acquaintances attempted to encourage the drop-out to continue his formal education (Table VII). In this respect, parents were listed by the greatest number of drop-outs (65 per cent of the females and 61 per cent of the males). School personnel

TABLE VII

FACTORS AND INFLUENCES WHICH ENCOURAGED OR DISCOURAGED
DROP-OUTS TO COMPLETE HIGH SCHOOL EDUCATION

Factors and Influences Discussion with or Action By*	Encouragement						Discouragement					
	Males N=47		Females N=39		Total N=86		Males N=47		Females N=39		Total N=86	
	N	% of Total	N	% of Total	N	% of Total	N	% of Total	N	% of Total	N	% of Total
School Personnel	26	55	18	47	44	53	14	29	8	21	22	26
Parents	29	61	25	65	54	65	8	17	4	10	12	14
Other Members of Family	13	27	16	42	29	35	16	34	13	34	29	35
Minister	4	8	2	5	6	7	0	0	0	0	0	0
Service Recruit- ing Personnel	5	10	1	3	6	7	7	15	1	3	8	10
Employment or Welfare Depart- ment	3	6	2	5	5	6	0	0	0	0	0	0
Potential Employers	2	4	0	0	2	2	2	4	3	8	5	6
Friend or Acquaintance	3	6	8	21	11	13	10	21	11	29	21	25

*A number listed one or more influences.

were given credit for encouraging 55 per cent of the males and 47 per cent of the females to stay in school. Only one other group of the aforementioned influencers received a sizable number of votes from the early school leavers. Approximately 27 per cent of the males and 42 per cent of the females stated they received encouragement from other members of their families.

Drop-outs indicated that they were discouraged in working for high school diplomas by school personnel, parents, other members of family, service recruiting personnel, potential employers, and friends and acquaintances. Figures indicate, however, that a greater number of people gave encouragement than discouragement. The one category receiving the greatest number of frequencies for discouraging drop-outs was "other members of family" (34 per cent for both sexes). Other responsible groups, blamed by over 10 per cent of either the males or females, were school personnel, friends or acquaintances, and service recruiting personnel.

Graduates who at some time during their high school career considered quitting school were requested to list factors and influences which encouraged them to finish secondary school. A total of 51 graduates, consisting of twenty-nine males and twenty-two females, stated that they had given serious thought to the possibility of discontinuing their education before graduation. When the replies for the

total group of graduates were analyzed, it was discovered that 53 per cent of the graduates said that school personnel encouraged them to finish school. (Table VIII). Others who were credited with having influenced the graduates were parents (listed by 39 per cent of the graduates), other members of family (35 per cent), potential employers (33 per cent), friends and acquaintances (27 per cent), service recruiting personnel (16 per cent), ministers (6 per cent), and employment and welfare department personnel (1 per cent). Also, 10 per cent of the total group of fifty-one stated that they studied the problem of quitting school and made a decision without aid while 8 per cent implied that no one influenced them and they continued their school because of inability to find anything better to do.

When males' and females' answers were tabulated separately, some differences were noticed as to whom received credit for encouraging students to finish school. For example, 59 per cent of the females listed parents, while only 24 per cent of the males listed father and mother; 45 per cent of the females listed other members of family while 28 per cent of the males' replies were recorded for service recruiting personnel while only 9 per cent of the females' answers were tabulated in this category.

TABLE VIII

FACTORS AND INFLUENCES WHICH HELPED ENCOURAGE GRADUATES
WHO HAD CONSIDERED QUITTING TO FINISH HIGH SCHOOL

Factors and Influences Discussion With or Action By	Males N=29		Females N=22		Total N=51	
	N	% of Total*	N	% of Total*	N	% of Total*
School Personnel	16	55	11	50	27	53
Parents	7	24	13	59	20	39
Other Members of Family	8	28	10	45	18	35
Minister	2	7	1	4	3	6
Service Recruiting Personnel	6	21	2	9	8	16
Employment or Welfare Department	3	10	2	9	7	1
Potential Employers	10	34	7	32	17	33
Studied Problem and Made Decision Alone	2	7	3	14	5	10
No real influence; could not find anything better	3	10	1	4	4	8
Friend or Acquaintance	7	24	7	32	14	27

*A number listed one or more influences.

III. CHARACTERISTICS OF DROP-OUTS

Another phase of this study was devoted to studying background information concerning the graduates in an attempt to identify characteristics of potential school drop-outs. To accomplish this aim factors pertaining to the educational and family histories of both graduates and drop-outs were obtained from the former student cumulative folder. The two groups were then compared statistically on each factor in order to determine if there were any relationship between the variables and whether students quit school or graduated from high school.

In cases where information was of a quantitative nature, the test to determine the significance of differences between means was applied; where the factors under consideration were of such a nature as to be recorded in nonquantitative distributions, the chi-square test was employed. In both instances the problem was to determine if the observed difference between the drop-outs and graduates was a "true" difference or was the difference attributed to chance occurrence.

For the purpose of simplicity, each time that observed differences between the two groups were tested for significance, a null hypothesis was formulated. The null hypothesis asserts that no true difference exists between the two samples in this study. Then the significance of the obtained difference

was tested by calculating the "t" test (in case of testing difference of means) and a chi-square (for non-quantitative distributions) and the resulting ratios were evaluated to determine probability of significance. If the observed difference was large enough to be significant at or less than the .01 level, the difference between the means of the two groups was accepted as a reliable and the null hypothesis was rejected. Significance at or less than the .01 level indicates that a difference as unusual as that observed would be expected only one time or less in 100 times.

In making the significance of difference test, the statistic is found by dividing the obtained difference between the means of the two samples by the standard error of difference. (Formula found on pages 7 and 9 in Chapter I). The resulting ratio is referred to a table of t-test values to determine level of significance.

The formula for calculating the chi-square test is also found on page 9 in Chapter I. In this test the difference between observed and expected frequencies are squared and divided by the expected frequency in each case, and the sum of these quotients is chi-square. The more closely the observed results approximate the expected frequencies, the smaller the chi-square; and, on the other hand, the greater the divergence between the observed and expected data, the larger the chi-square. The greater the chi-square the more

chance that the difference between obtained frequencies and expected frequencies is a reliable difference. The actual level of significance is determined by referring the obtained chi square to a probability table.

Table IX presents the means, standard deviations, and probability of difference of means related to the total group of drop-outs' and graduates' school histories. When the difference in the intelligence quotients between the eighty-six drop-outs and graduates was compared, the difference of 7.84 between the mean of 96.54 for the graduates and 88.61 for the drop-outs was found to be significant at the .001 level. This indicates, therefore, that the difference is accepted as reliable.

In reviewing the comparisons of other factors in Table IX, it is seen that there is a significant difference in favor of graduates at the .001 level between academic grade averages, average personality ratings, and eighth grade achievement test results. Drop-outs' means were significantly greater than graduates' means in average number of days absent from school per year, average number grades repeated, and average number of siblings in family. There was no reliable difference between the means of the two groups when compared on the amount of education completed by fathers and mothers.

When the difference in the means of factors in the drop-outs' and graduates' school histories were compared for

TABLE IX

MEANS, STANDARD DEVIATIONS, AND PROBABILITY OF DIFFERENCE
OF MEANS FOR FACTORS RELATED TO TOTAL GROUP OF DROP-OUTS'
AND GRADUATES' SCHOOL HISTORIES

Factors	Graduates N=111		Drop-Outs N=86		t and Probability of Significance
	Mean	S.D.	Mean	S.D.	
Intelligence Quotient	96.45	5.22	88.61	4.13	$t = 3.40 > p = .001^{**}$
Academic Grades	4.03	.18	3.15	.21	$t = 3.44 > p = .001$
Personality Rating	4.16	.26	3.36	.14	$t = 4.01 > p = .001$
Eighth Grade Achiev- ement Test Grade Level	8.32	.16	6.54	.31	$t = 3.59 > p = .001$
Number Days Absent Per Year	5.44	.36	6.32	.44	$t = 3.31 > p = .001$
Number Books Read Per Year	10.88	3.05	9.24	.60	$t = 3.46 > p = .001$
Number Grades Repeated	.62	.04	1.02	.06	$t = 3.80 > p = .001$
Number of Siblings	3.39	.11	4.19	.08	$t = 3.36 > p = .001$
Number Years School Completed by Father	6.32	.94	6.10	.92	$t = 2.58 < p = .05^{*}$
Number Years School Completed by Mother	7.03	.42	7.11	.64	$t = .84 < p = .05$

*t of 1.96 $p = .05$; **t of 3.29 $p = .001$; N = 197; S.D.--
Standard Deviation.

each sex, the female variances (Table X) between the two groups resulted in a picture similar to findings when the total groups of drop-outs and graduates were studied. In the case of the males, Table XI, there was found a "true" difference at the .001 in favor of the graduates in intelligence quotients, grade averages, average personality ratings and eighth grade achievement tests.

Because one factor in the school histories of the former students, economic status of parents, had to be tabulated in a nonquantitative distribution, a chi-square analysis was made of this data. The chi-square analysis between the difference in economic status for drop-outs and graduates by total groups and sex are shown in Table XII. In each case the difference between the observed and expected frequency was not large enough to give a chi-square of 9.21 which was needed for significance at the .01 level. The chi-square for the total group was only 7.18; for the female group, only 5.16; and for the male group only .32. It can be stated, therefore, that there is no relationship between economic status of parents and whether the former students completed their high school educations.

IV. COMPARISONS OF OCCUPATION HISTORIES

Another phase of this study was devoted to comparing the occupation histories of drop-outs and graduates. Former

TABLE X

MEANS, STANDARD DEVIATIONS, AND PROBABILITY OF DIFFERENCE
OF MEANS FOR FACTORS RELATED TO FEMALE DROP-OUTS'
AND GRADUATES' SCHOOL HISTORIES

Factors	Graduates N=58		Drop-Outs N=39		t and Probability of Significance
	Mean	S.D.	Mean	S.D.	
Intelligence Quotient ³⁹	99.41	6.11	92.41	3.66	t = 3.60 > p = .001**
Academic Grades	4.25	.20	3.08	.45	t = 3.49 > p = .001
Personality Rating	4.19	.22	3.02	.22	t = 3.80 > p = .001
Eighth Grade Achiev- ement Test Grade Level	8.39	1.32	7.11	1.44	t = 4.00 > p = .001
Number Days Absent Per Year ⁹¹	4.62	.48	3.45	.91	t = 3.52 > p = .001
Number Books Read Per Year	10.44	3.01	9.04	1.24	t = 3.84 > p = .001
Number Grades Repeated	.32	.09	.96	.04	t = 4.90 > p = .001
Number of Siblings	3.91	.46	5.18	1.20	t = 3.72 > p = .001
Number Years School Completed by Father	6.30	.32	6.21	.26	t = .72 < p = .05*
Number Years School Completed by Mother	7.00	.10	7.14	.16	t = 1.60 < p = .05

*t of 1.98 p = .05; **t of 3.46 p = .001; N = 97; S.D.--
Standard Deviation.

TABLE XI

MEANS, STANDARD DEVIATIONS, AND PROBABILITY OF DIFFERENCE
OF MEANS FOR FACTORS RELATED TO MALE DROP-OUTS'
AND GRADUATES' SCHOOL HISTORIES

Factors	Graduates N=53		Drop-Outs N=47		t and Probability of Significance
	Mean	S.D.	Mean	S.D.	
Intelligence Quotient	94.32	4.19	86.35	4.11	$t = 3.78 > p = .001^{**}$
Academic Grades	3.98	.31	3.20	.25	$t = 3.50 > p = .001$
Personality Rating	4.13	.19	33.71	.24	$t = 3.48 > p = .001$
Eighth Grade Achievement Test Grade Level	8.29	.94	5.47	1.20	$t = 3.91 > p = .001$
Number Days Absent Per Year	6.04	2.19	7.21	3.32	$t = 1.84 < p = .05^{*}$
Number Books Read Per Year	10.96	3.16	10.05	3.28	$t = 1.21 < p = .05$
Number Grades Repeated	.76	.06	1.11	.50	$t = 1.96 < p = .05$
Number of siblings	3.88	.19	3.86	.11	$t = .98 < p = .05$
Number Years School Completed by Father	6.38	1.00	5.86	1.20	$t = 1.84 < p = .05$
Number Years School Completed by Mother	7.09	.76	7.02	.89	$t = 1.02 < p = .05$

*t of 1.98 $p = .05$; **t of 3.46 $p = .001$; N = 100; S.D.-- Standard Deviation.

TABLE XII

COMPARISON OF ECONOMIC STATUS OF PARENTS
OF DROP-OUTS AND GRADUATES
BY TOTAL GROUP AND SEX

	Good		Moderate		Low		Total	
	N	%	N	%	N	%	N	%
<u>Total Group</u>								
Drop-Outs	17	20	47	55	22	25	86	100
Graduates	28	25	70	63	13	12	111	100
Total	45	23	117	59	35	18	197	100
$\chi^2 = 7.18$ $9.21 = p = .01$ df = 2								
<u>Female Group</u>								
Drop-Outs	6	15	22	57	11	27	39	100
Graduates	13	23	39	67	6	10	58	100
Total	19	20	61	63	17	17	97	100
$\chi^2 = 5.16$ $9.21 = p = .01$ df = 2								
<u>Male Group</u>								
Drop-Outs	12	26	26	54	9	20	47	100
Graduates	14	27	32	58	7	14	53	100
Total	26	26	58	58	16	16	100	100
$\chi^2 = .32$ $9.21 = p = .01$ df = 2								

students were requested to state the present job in which they were employed, their weekly earnings, number of times they had changed jobs, number of problems faced in jobs held, and the number of promotions they had received.

It was discovered that slightly over 40 per cent of the former students from the class of 1950 were employed in either furniture, textiles, and clerical and sales occupations. The other 60 per cent were working at a variety of jobs, attending school, keeping house, or serving in the armed services.*

The occupations reported by the graduates and drop-outs were grouped for comparison under the seven major occupational groups listed in the Dictionary of Occupational Titles¹³ plus attending school and homemakers categories. Table XIII presents the tabulations under these headings for total group and by sex. For the total group of drop-outs it was found that the largest number were employed in semi-skilled occupations (43 per cent), clerical and sales (19 per cent), as homemakers (14 per cent), and unskilled occupations (13 per cent). Less than 10 per cent of this group held jobs in professional or managerial, service occupations, skilled occupations, attending school, or agriculture, forestry, or fishery industries.

*A list of students by actual occupational titles is on file in the Burke County Guidance Services Office, Morganton, N. C.

¹³Dictionary of Occupational Titles, (Washington, D. C.: United States Department of Labor), March, 1949, P. XIX.

TABLE XIII

PRESENT EMPLOYMENT OF DROP-OUTS AND GRADUATES ACCORDING TO THE SEVEN MAJOR
OCCUPATIONAL GROUPS IN THE DICTIONARY OF OCCUPATIONAL TITLES
OR ATTENDING SCHOOL AND HOME-MAKERS

Former Students	Prof. and Manag.	Cler. and Sales	Service Occupa- tions	Agric. and Forestry and Fishery	Skilled Occupa- tions	Semi- Skilled Occupa- tions	Un- skilled Occupa- tions	In School	Home- Makers	Total
	N %	N %	N %	N %	N %	N %	N %	N %	N %	N %
Total Drop-Outs	1 1	16 19	1 1	4 5	2 2	37 43	11 13	2 2	12 14	86
Total Graduates	12 11	27 24	0 0	2 2	17 15	26 23	2 2	9 8	16 15	111
	$\chi^2 = 30.79$ 26.12 = p = .001									
Female Drop-Outs	0 0	15 38	1 2	0 0	1 3	7 18	2 5	1 3	12 31	39
Female Graduates	5 9	20 34	0 0	0 0	4 7	10 17	1 2	2 3	16 28	58
	$\chi^2 = 5.23$ 20.09 = p = .01									
Male Drop-Outs	1 2	1 2	0 0	4 8	1 2	30 65	9 19	1 2	0 0	47
Male Graduates	7 13	7 13	0 0	2 4	13 25	16 31	1 1	7 13	0 0	53
	$\chi^2 = 34.08$ 26.12 = p = .001									

Prof.---Professional, Manag.---Managerial, Cler.---Clerical, Agric.---Agriculture.

In contrast, former students in the total graduate student group were employed in clerical and sales (27 per cent), semi-skilled occupations (23 per cent), as homemakers (15 per cent), professional and managerial (11 per cent), and attending school (8 per cent). Only 4 per cent of the graduates were holding jobs in service occupations, agriculture, forestry, fishery, and unskilled occupations.

In making a statistical comparison by the chi-square test between the job classification for the total group of graduates and drop-outs, it was discovered that the two categories of students vary significantly. Only a chi-square as large as 26.12 was needed; a chi square equal to 30.79 was observed in this case.

When the females in the two groups were compared, a close similarity in job classifications was noted. Approximately 38 per cent of the drop-outs and 34 per cent of the graduates were employed in clerical and sales, 31 per cent of the drop-outs and 28 per cent of the graduates were homemakers, and 18 per cent of the drop-outs and 17 per cent of the graduates worked at semi-skilled jobs. The greatest contrast was observed in the professional and managerial classification in which 9 per cent of the graduates but no drop-outs were listed. The other classifications in which few individuals of either group were employed showed little

difference in frequencies. A statistical comparison confirms the similarity in the two groups. The resulting chi-square of 5.23 was far less than the 20.09 needed for significance at the .01 level.

Unlike the females, the male graduates and drop-outs demonstrated a considerable amount of variance in employment classifications. The job classifications with percentages for drop-outs and graduates follow: Professional and managerial; drop-outs 2 per cent and graduates 13 per cent; clerical and sales, drop-outs 2 per cent and graduates 13 per cent; service occupations, both drop-outs and graduates 0 per cent; agriculture, forestry, and fishery, drop-outs 8 per cent and graduates 4 per cent; skilled labor, drop-outs 2 per cent and graduates 25 per cent; semi-skilled, drop-outs 65 per cent and graduates 31 per cent; unskilled, drop-outs 19 per cent and graduates 1 per cent; and attending school, 2 per cent of the drop-outs and 13 per cent of the graduates. As would be expected, there were no individuals from either male group classified as homemakers. A chi-square of 34.03, indicated a marked difference between the two groups and was greater than the chi-square of 26.12 needed for significance at the .001 level of confidence.

Other comparisons in the job histories of drop-outs and graduates are shown in Table XIV. For the total groups,

the \$51.02 received by drop-outs and the \$60.09 paid graduates weekly was not statistically significant. The difference of \$2.19 would be expected by change in almost two times out of ten. Likewise, the difference of \$2.60 between the \$45.61 for female drop-outs and \$48.21 for female graduates proved to be insignificant. Weekly salaries of most graduates, on the other hand, were significantly higher than the male drop-outs' weekly earnings. The difference of \$4.15 between the \$44.06 for drop-outs and \$59.21 for graduates was a reliable difference.

Each time the total group, the females, and males, drop-outs and graduates were compared on number of times jobs changed, number of problems faced on jobs, and number of promotions; the difference between those who left school and those who graduated varied enough to be significant at the .001 level. This indicates that the graduates changed jobs fewer times, faced fewer problems, and received more promotions than their fellow students who quit school before graduation. The exact means and differences for these comparisons are found in Table XIV.

V. EVALUATION BY LAY PARTICIPANTS

The last problem in the study was designed to obtain an evaluation of benefits derived by thirty-four lay participants who helped conduct the study by interviewing former

TABLE XIV

MEANS, STANDARD DEVIATIONS, AND PROBABILITY OF DIFFERENCE
OF MEANS FOR FACTORS RELATED TO DROP-OUTS' AND GRADUATES'
EMPLOYMENT HISTORIES

Factors	Total				
	Drop-Outs N=72		Graduates N=86		t and Probability of Difference
	Mean	S.D.	Mean	S.D.	
Weekly Earnings	\$51.02	6.10	\$60.09	6.13	$t = 1.59 < p = .05$
Times Jobs Changed	1.26	.02	.64	.01	$t = 3.38 > p = .001$
Number Problems Faced on Job	2.16	.04	1.18	.02	$t = 3.50 > p = .001$
Promotions	.45	.02	1.02	.03	$t = 3.53 > p = .001$

Factors	Females				
	Drop-Outs N=29		Graduates N=31		t and Probability of Difference
	Mean	S.D.	Mean	S.D.	
Weekly Earnings	\$45.61	6.21	\$48.21	4.96	$t = 1.69 < p = .05$
Times Jobs Changed	1.14	.03	.59	.02	$t = 3.61 > p = .001$
Number Problems Faced on Job	2.44	.05	1.26	.03	$t = 3.81 > p = .001$
Promotions	.44	.02	1.05	.01	$t = 3.90 > p = .001$

Factors	Males				
	Drop-Outs N=43		Graduates N=55		t and Probability of Difference
	Mean	S.D.	Mean	S.D.	
Weekly Earnings	\$55.06	6.44	\$59.21	6.20	$t = 3.93 > p = .001$
Times Jobs Changed	1.48	.02	.71	.03	$t = 3.72 > p = .001$
Number Problems Faced on Job	2.00	.04	1.05	.03	$t = 3.56 > p = .001$
Promotions	.46	.03	1.01	.05	$t = 3.54 > p = .001$

S.D.--Standard Deviation.

students and helping tabulate data. At the inception of the study, it was believed that the technique of using lay citizens in studying school problems would lead to increased interest and better understanding of such school problems on the part of the participants. In order to evaluate this belief, the thirty-four lay participants were requested to state whether they obtained a better understanding of students', teachers', and parents' problems; have better insight into and more interest in the schools' program; and whether they believed that participation by citizens in school studies would improve the schools' public relations. Table XV presents the citizens' replies.

All thirty-four participants thought that they had received considerable insight into and more interest in the schools' program, and believed that the schools could effectively improve their public relations program by using citizens as participants in the study of school problems. Out of 32 replies, 88 per cent of the citizens believed that they had received much help in better understanding students' problems, 78 per cent better understanding of teachers' problems, and 94 per cent better understanding of parents' problems. The remainder of those answering the questions stated that they had received some help in this respect. It was significant that not one of the participants stated that they failed to receive benefits from having worked on the study.

TABLE XV
EVALUATION OF DROP-OUT STUDY BY LAY PARTICIPANTS

Benefits Derived	Number Report- ing	Received Lot of Help		Received Some Help		Received No Help	
		N	%	N	%	N	%
Better Insight Into Schools' Programs	34	34	100	0	0	0	0
Increased Interest In Schools' Programs	34	34	100	0	0	0	0
Better Understanding of Students' Problems	32	28	88	4	12	0	0
Better Understanding of Teachers' Problems	32	25	78	7	22	0	0
Better Understanding of Parents' Problems	32	30	94	2	6	0	0
Improved Public Relations	34	34	100	0	0	0	0

It can be assumed, therefore, that the technique of using lay citizens as helpers in conducting school studies has been a worthwhile endeavor in this particular investigation and should be a plan that could be profitably employed by other school personnel in studying school problems.

CHAPTER III

SUMMARY

The purpose of this investigation was (1) to gain suggestions for improving schools; (2) to determine reasons why students left before or remained in school until graduation; (3) to determine characteristics of school drop-outs, (4) to compare occupational histories of drop-outs and graduates; and (5) to evaluate the technique of involving lay citizens in studying school problems.

This study was a part of and a continuation of the Burke County Follow-Up Study which was conducted in 1955-56. All six high schools participated in the original study, whereas only former students from the Drexel, Valdese, and Hildebran High Schools were investigated in this report. In the main, phases not considered in the first study were emphasized.

Only students who entered the three above-mentioned schools in 1946 and were scheduled to graduate in 1950 were investigated. Of the 197 former school pupils, 111 were graduates and 86 drop-outs. There were 58 girls and 53 boys in the graduate group and 47 boys and 39 girls in the drop-out group.

Information concerning each student was obtained from either the students' cumulative folder or from a

questionnaire which was mailed to former students residing out of Burke County.

A team of thirty-four lay citizens interviewed former students who were living in the county. These same helpers, plus students and teachers, helped copy and tabulate information from the questionnaires and cumulative folders. The citizens who had given aid in completing the study were requested to evaluate their experience after having cooperated in conducting the investigation.

When necessary, appropriate statistical techniques were employed to help answer the problems proposed for the study. In cases when comparisons were made between drop-outs' and graduates' data in quantitative distributions, the test for the difference of means was calculated; when the data for the two groups was of a non-quantitative nature, the chi square test was employed.

The first problem in the investigation was to gain suggestions from former students for improving the school. In order to meet this objective, former students were requested to rate the subjects and activities which they had had while in school and, then, to list those subjects which they believed needed more emphasis.

Graduates gave a rating of "good" to the lunchroom, guidance, human relations, English, mathematics, science, and commercial programs. The same rating was received from the

drop-outs for the lunchroom, guidance, agriculture, home economics, English, and commercial programs. Except for the extra-curricular program which was given a "poor" rating from the drop-outs, the other subjects and activities in the three schools received "average" ratings.

The six subjects for which graduates gave the largest number of votes as needing more emphasis were guidance program, the library, human relations courses, English, science, and mathematics. Among the subjects receiving the most votes from the drop-outs were the six listed above with the exception of commercial courses being substituted for science.

The second problem was to discover reasons why students left before or remained in school until graduation. Drop-outs were asked to list the primary reason they left school before graduation and to state influences which either discouraged or encouraged them to leave school early. The first three reasons in order of rank given by females for quitting school were: (1) wanted a job or needed money for self, (2) to get married, and (3) unable to dress well. In the case of the males, "wanting a job and needing money for self" was also listed first; but receiving the second and third highest number of frequencies were: "saw no value in education" and "parents needed help at home". Receiving far fewer votes from both sexes were the following: "failing work," "school work too difficult", and "broken homes."

Encouraging the early school leavers to remain in school were school personnel, parents, other members of family, ministers, service recruiting personnel, employment and welfare department personnel, potential employers, and friends and acquaintances. Of those listed, school personnel, parents, and other members of the drop-outs' family did most in the way of influencing the students not to quit school. Surprisingly enough, the same three groups of individuals, in addition to friends and acquaintances, did most to discourage the students to continue their education.

Graduates who had at one time considered quitting school received encouragement to graduate from approximately the same individuals who influenced drop-outs. Encouraging over 25 per cent of the potential drop-outs from the graduate group were school personnel, parents, members of family, service recruiting personnel, potential employers, and friends and acquaintances.

The third problem in the investigation was to determine characteristics of potential drop-outs. To accomplish this aim, an attempt was made to discover if factors in the background of former students discriminated between the drop-outs and graduates. Comparisons between the two groups were made on factors that follow: intelligence quotients, academic grades, personality ratings, eighth grade achievement test, number days absent from school per year, number of books

read per year, number of grades repeated, number of siblings, educational status of father and mother, and economic status of parents.

Of all the factors considered, drop-outs and graduates differed significantly on all of the above factors except for education and economic status of parents. On the other hand, male drop-outs and graduates varied significantly only on intelligence quotients, grade average, average personality ratings, and eighth grade achievement test medians.

The comparison of occupational histories of drop-outs and graduates was the fourth step in the study. It was discovered that female and male drop-outs changed jobs more often and faced more problems at work than graduates, but graduates for both sexes received more promotions than drop-outs. Also, there was a significant difference in favor of the male graduates over the male drop-outs in weekly earnings. No reliable difference was found in the weekly salaries earned by the two female groups.

In comparing the types of jobs held by the two categories of former students, the jobs for each group were classified according to the seven major occupation groups found in the Dictionary of Occupational Titles and in school or homemakers classification. In general, for the total groups the graduates appeared to have a larger percentage employed in professional and managerial, skilled occupations,

and attending school classifications; while drop-outs had more employed in unskilled, and semi-skilled occupations. A statistical analysis proved that there was a significant difference in the types of jobs held by the two groups.

When analyzed by sex groups, the findings for the male drop-outs and graduates were similar to the findings discovered for the total groups. There appeared, however, to be no apparent difference between female graduates and drop-outs.

The last step in the investigation was devoted to evaluating benefits derived by lay participants from having helped with the follow-up study. The replies of these helpers indicate conclusively that the technique of involving citizens in the study of school problems is a helpful method of improving public relations, and increasing interest and understanding of the schools' program. Between 78 and 100 per cent of the participants stated that they benefited by obtaining better insight and increased interest into the schools' program, gaining better understanding of students', teachers', and parents' problems, and observing improved public relations by having helped with the Study.

I. CONCLUSIONS AND IMPLICATIONS

As a result of the findings of this study the following conclusions and implications are warranted:

(1) Former students are more than willing to evaluate their high school programs. Since they have been recent students in the school program, their appraisal of the schools' weak and strong points should be as reliable as any evaluation. Most surely, their opinions should be considered seriously before any major curricular or program changes are made or in-service training programs initiated.

(2) There are personal characteristics which are related to whether a student will quit or graduate from high school. When possible these characteristics should be identified and used by school personnel to encourage potential early school leavers to stay in school.

(3) Former drop-outs are willing to state reasons for quitting school. Furthermore, they can and will identify people who encouraged or discouraged them to stay in school. This information, also, should be utilized to encourage students to finish school.

(4) A study of this nature will point to the many significant advantages of completing a high school education. Disadvantages and advantages of an education should be recognized and continually presented to students and others who are concerned with their welfare.

(5) The technique of using lay citizens in studying school problems results in some outstanding benefits. Those who help study and identify school problems will usually

through participation become more interested in and understand better public school problems. This technique is highly recommended as a method of improving public relations.

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APPENDIX

SCHOOL DATA SHEET
Drop-Out and Graduate Study
Burke County, N. C. Schools

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Name of Student (If married, write in husband's name also). _____ School _____

Last address known _____ Telephone _____ Last grade completed _____

Last mental ability test: Name _____ Yr. _____ I.Q. _____

General level on achievement tests-Above grade level _____ At
grade level _____ Below grade level _____

Grades and subjects repeated _____

Attendance: Average number of days absent _____ (Sum No. days
absent for each year and divide by number school years completed.)

Approximate academic grade average (please check)
A _____ B _____ C _____ D _____ BELOW D _____

Approximate average on evaluation of social and personal assets:
(1) Superior _____ (2) Above average _____ (3) Average _____
(4) Below average _____

Reading interests A _____ B _____ C _____ D _____

Approximate number books read per year _____ (Sum books for each
year and divide by total number school years completed.)

Health _____ Physical handicaps? _____ List handicap (s)
Good Fair Poor

Educational status of student's parents: (Mother) _____
(Father) _____

Educational status of guardian _____ (last grade completed)

Parent's marital status during school years _____
M. & living together

Sep. _____ Divorced _____ Parent not living _____

Economic status of family _____
Good Moderate Low Unknown

Number children in family: _____

Using the section "Significant Notes", on back of cumulative record,
sum up the general evaluation by teachers of the student as:
Favorable _____ Undecided _____ Unfavorable _____

Summary of Activities and Honors (Use Section VII of Cumulative
Record, plus information from yearbooks and other sources.

APPENDIX B

SUMMARY TABLES FOR PERSONAL
INTERVIEW GUIDE AND QUESTIONNAIRE

DROP-OUT AND GRADUATE STUDY

BURKE COUNTY SCHOOLS, NORTH CAROLINA

Name of School	
Number of Male Drop-Outs Participating in Study	
Number of Female Drop-Outs Participating in Study	
Number of Male Graduates Participating in Study	
Number of Female Graduates Participating in Study	
Number of Laymen Participating in Study	
Number of School Personnel Participating in Study	
Number of Students Participating in Study	

PERSONAL INTERVIEW TABLE 19 Subjects or Activities Least Helpful

GRADUATE			DROP-OUT		
Total	F	M	F	M	Sex
					Math
					English
					Home Economics
					Agriculture
					Science
					Physical Education
					History
					Music
					Reading

TABLE 19 Subjects or Activities Least Helpful (Continued)

ADUATE			DROP-OUT		
1	F	M	F	M	Sex
					Book-keeping
					Typing
					Glee Club
					Student Council
					Sports
					Geography
					Spelling

Personal Interview Guide and Questionnaire
Drop-Out and Graduate Study
Burke County Schools, N. C.

Instructions: Please write in or check (✓) your replies to the following questions. Items with (*) are to be answered only by those who took course work beyond the high school level. Items with (**) are to be answered by those who did not complete high school.

Name of Student _____ Address _____ Telephone _____

If married, write in husband's name also

Single _____ Married _____ Separated _____ Divorced _____ Widowed _____

Number of children _____ School _____ Interviewer _____

Employer _____ Present job _____ Full time _____

Part-time _____ How long worked _____ Earnings weekly _____

1. What was the last date you attended public school? _____
In what grade were you enrolled? _____

2. What additional training have you had since leaving the public schools? (Correspondence, apprenticeship, night school, college, military)

Name of school or service	Courses taken	Months spent	Degree or Diploma
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3. What vocation did you select as your life work when you were in school? _____

4. Can you suggest anything you wish the public school had taught you? (Hobbies, health, community and civic affairs, management of money, etc.) If so, what? _____

5. Did you find the world of work what you expected it to be?
Yes _____ No _____ Don't know _____

6. Can you think of any problems you faced on your jobs? If so, list.

7. Did the training you had received at school help you with these problems? Very much _____ Some _____ No Help _____

8. What kind of work do you eventually expect to do? _____

9. What courses have been most most difficult for you since leaving school? _____

10. What courses have been least difficult for you? _____

11. Had you made a definite decision as to what you would major in before you entered college or other advanced education? Yes No Who helped you make this decision? Friend Relative Parent Principal Teacher Counselor Others (please list) Do you consider the choice a wise one? Yes No
12. Who helped you most in selecting an occupation and in making your educational and vocational plans? Parents Relatives Friends Teachers Principal Counselor Work experience School subjects No help received
13. Did anyone help you get your first steady job after leaving school? Parents Relatives Friends Principal Own effort Counselor Employment Office Newspaper advertising Others
14. Where did you acquire the knowledge or training needed in your present occupation? In high school In college Technical school At home On the job Other sources, please list.
15. You probably had a favorite teacher-Yes No If you did, how did this teacher help you?
16. What school subjects or activities did you like best?
17. What school subjects or activities did you like least?
18. What school subjects or activities have been most helpful to you?
19. What school subjects or activities have been least helpful to you?
20. Why were these subjects not helpful?
21. What could you have done while in school to make your school of more benefit to you?
22. What could your teachers have done?
23. Why did you leave school? (List reasons in order of importance.)
24. What people influenced you in leaving school? Employer Parents Principal Teachers Counselors Others
25. What people encouraged you to stay in school? Employer Parents Principal Teachers Preacher Counselor Others (list)

26. How did your parents or guardian feel about your leaving school?
 Father? _____
 Mother? _____
 Guardian? _____
 Brothers and sisters? _____
27. If you had another chance to make a decision about dropping out of school, would you remain in school until you graduate? Yes _____
 No _____ Undecided _____
28. Did you ever consider returning to school? Yes _____ No _____
29. Did you represent your high school in varsity sports? Yes _____
 No _____
30. Did you participate in other extra curricular activities such as Glee Club, band, dramatics, debating, clubs, etc.? Yes _____
 No _____
31. Please rate the following subjects or activities by placing a cross (X) under either (5) Superior, (4) Good, (3) Average, (2) Poor, (1) or Very Poor. Please give one rating for each item. If item was not included in your high school program, write in "None".

	5 Superior	4 Good	3 Average	2 Poor	1 Very Poor
Meals in lunchroom	_____	_____	_____	_____	_____
Transportation	_____	_____	_____	_____	_____
Physical Ed. and Athletic Program	_____	_____	_____	_____	_____
Library	_____	_____	_____	_____	_____
Guidance Program	_____	_____	_____	_____	_____
Human Relations Courses	_____	_____	_____	_____	_____
Agriculture	_____	_____	_____	_____	_____
Industrial Arts	_____	_____	_____	_____	_____
Home Economics	_____	_____	_____	_____	_____
Extra Curricular (Glee Club, Band, Dramatics, etc.)	_____	_____	_____	_____	_____
Student Council	_____	_____	_____	_____	_____
English or Literature	_____	_____	_____	_____	_____

	5 Superior	4 Good	3 Average	2 Poor	1 Very Poor
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Foreign Language	_____	_____	_____	_____	_____
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Social Studies (History, civics, geography, economics, etc.)	_____	_____	_____	_____	_____
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Mathematics (Algebra, Business Arithmetic, Geometry)	_____	_____	_____	_____	_____
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Science (Biology, chemistry, general science)	_____	_____	_____	_____	_____
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Commercial Courses (Typing, shorthand, bookkeeping)	_____	_____	_____	_____	_____
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Health	_____	_____	_____	_____	_____
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Please look over the above list of activities and subjects again and underline those which you believe deserve more emphasis.

If there are any comments that you should like to make in respect to your educational experience in Burke County, please use the space below for this purpose.